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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

	Application No.	Applicant(s)
Office Action Summary	10/766,984	ZIEGLER ET AL.
	Examiner	Art Unit	
	Tuan A. Vu	2193	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 July 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/3/07</u>.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to the Applicant's response filed 7/03/07.

As indicated in Applicant's response, claims 7-8, 13 have been amended. Claims 1-20

are pending in the office action.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3.   Claims 1-9, 19-20 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter.

> The Federal Circuit has recently applied the practical application test in determining whether the claimed subject matter is statutory under 35 U.S.C. § 101. The practical application test requires that a " useful, concrete, and tangible result" be accomplished. An "abstract idea" when practically applied is eligible for a patent. As a consequence, an invention, which is eligible for patenting under 35 U.S.C. § 101, is in the "useful arts" when it is a machine, manufacture, process or composition of matter, which produces a concrete, tangible, and useful result. The test for practical application is thus to determine whether the claimed invention produces a "useful, concrete and tangible result".

The current focus of the Patent Office in regard to statutory inventions under 35 U.S.C. §

101 for method claims and claims that recite a judicial exception (software) is that the claimed

invention recite a practical application. Practical application can be provided by a physical

transformation or a useful, concrete and tangible result. The following link on the World Wide

Web is for the United States Patent And Trademark Office (USPTO) policy on 35 U.S.C. §101.

<http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf>

Specifically, claim 1 recites a system having updates for creating an image, and

comprising a preparation engine, a package engine, an overwrite engine and an install engine.

From the Specifications (e.g. Figure 1) these engines are software-implemented components to

support the update process as illustrated; hence the claim amounts to mere listing of software

components whose functionality cannot reasonably be otherwise realized into a real-world result,

absent any hardware support. That is, claiming what appears to be mere Functional Descriptive

Material without hardware support would be categorized as a descriptive material per se -- the

explanation of which can be reached in the above *pdf* Guidelines at Annex IV (see pg. 53-54)--

hence non-statutory. Thus, it is deemed that the claimed software components listing is not

sufficient to convey that real world data transformation can be achieved to fulfill the Practical

Application requirement; that is, a transformation so to yield a tangible, concrete and useful

result. The claim amounts to a non-practical application and is rejected for leading to a non-

statutory subject matter.

Claims 2-9 are rejected for not curing to the above lack-of-hardware-embodiment

deficiency.

Claim 19 recites a information handling system comprising a OS plural files, an alternate

OS, an update package having update files, and a overwrite engine. These listed elements are

not perceived to be hardware embodied or supported; hence the claim as a whole lacks hardware

to embody and support the functionality of the OS, the files and the engine as recited. The claim

fails to reasonably convey that real-world transformation is possible in order to yield a concrete,

useful and tangible result, as required by the Practical Application test. As set forth above,

claims 19 and 20 are also rejected for leading to a non-statutory subject matter.

Claim Objections

4.   Claim 3 is objected to because of the following informalities: 'update ... engine ... to

assign the update source file to overwrite ... secondary source file'. The language using the term

"assign" in overwrite another file cannot be construed as proper, notwithstanding the pertinent

description in the Specifications, according to which, there is no part explicitly mentioning about

an update engine assigning any source update file to overwrite any corresponding secondary file.

The language using 'assign' seems idiomatically far-fetched and not reasonably accepted by

well-established and common semantic standards; and this would render the language improper

and semantically unjustified in terms of how a source file can be assigned to overwrite another

file, lacking appropriate support from the Disclosure. For example, the Update package engine (

see Specifications pg. 5) executes the process of extracting update files being downloaded and

replaces the OS files with these update files. It is indefinite as to how an update file can be

assigned (the task) to overwrite since any such *update file* is only passive object being subjected

to the replacement process performed by the above software *Engines*. The above impropriety

will be treated as though the update engine uses the update file as one means in the process by

which the engine overwrites another secondary file.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-3, 5-7, 9-11, 13, 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated

by Goodman et al. USPN: 7,146,640 (hereinafter Goodman).

As per claim 1, Goodman discloses a system for creating an operating system image (see

SOS software image - col. 13, § 3.1), the image having preintegrated updates, the system

comprising:

an operating system preparation engine operable to remove (e.g. *write selected files ... to*

the primary operating system - col. 11, § 1.3.2 col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* – §

3.2.2.1, col. 15; § 3.3.1 col. 17 --Note: completion of installation based on cleaning up a SOS

instance reads on removing POS file) the operating system source file;

an update package engine operable to package one or more updates for integration with

the operating system, each update having one or more files (e.g. col. 6, line 58 to col. 7, line 25;

Fig. 8B; col. 13, § 3.1),

the update package engine extracting the update files and assigning file and directory

structures (e.g. *V-drive, SOE, SOS loaded ... access ... similar manner ... primary operating*

system – col. 8, lines 15-32) to the update files that replace corresponding files in the operating

system directory; an overwrite engine operable to write the packaged update files over (see *write*

selected files ... to the primary operating system - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1)

the corresponding operating system files (e.g. col. 8, lines 15-32 – Note: loading of SOS files to

operate the target POS --primary operating system-- with change to registry -- § 3.1, col. 13 --

reads on writing over the POS source files); and

an install engine operable to register the update with the operating system on initial boot

of the operating system (e.g. *Primary OS/Registry, DLL Registrations ... reboot ... complete*

installation – § 3.1, col. 13; § 3.2.5 col. 15).

As per claim 2, Goodman discloses an alternative operating system operable to support

the operation of the overwrite engine (e.g. col. 7, lines 1-10; col. 8, lines 15-32; § 3.1, col. 13;

Fig. 8G) to write update files over the operating system files.

As per claim 3, Goodman discloses wherein the operating system has a primary and a

secondary source files (e.g. Fig. 4C-D), the operating system preparation engine further operable

to remove the primary source file, the update package engine further operable to identify an

update source file and to assign the update source file to overwrite the corresponding secondary

source file (Note: overwriting engine with writing over primary OS files and registry entries

reads on update file overwriting secondary source file -- col. 8, lines 15-32; § 3.1, col. 13; and

removing of the SOS file after installation reads on removing a primary OS source file because

the SOS package is in part a replica of the main OS – see claim 2).

As per claims 5-6, Goodman discloses wherein the update package engine is further

operable to identify and select security updates (see Internet Access permissions – Fig. 8B; Fig.

8E) for packaging; wherein the security updates comprise updates operable to address a security

vulnerability associated with worms (e.g. *worms* – col. 19, lines 49-61; Fig. 8E).

As per claim 7, Goodman teaches updates being a quick fix engineering environment

with files pertinent thereto (e.g. Fig. 8A-B, 8G – Note: creating an SOS image from a one

download to generate files installation of Windows and updating registry change reads on quick

fix).

As per claim 9, Goodman discloses an operating system image creation engine operable to copy the booted operating system as an image for use in manufacture (e.g. *SOS image ... delivered to user* -- § 3.2, col. 13) of information handling systems.

As per claim 10, Goodman discloses a method for creating an operating system image, the image having integrated updates (*SOS software image* - col. 13, § 3.1; *commercially available* – § 3.1, col. 13), the method comprising:

removing the source file of the operating system (e.g. col. 8, lines 15-32; § 3.1, col. 13; and removing of the SOS file after installation reads on removing a primary OS source file because the SOS package is in part a replica of the main OS – see col. 8, lines 15-32); extracting an update file from an operating system update (e.g. *V-drive, SOE, SOS loaded ... access ... similar manner ... primary operating system* – col. 8, lines 15-32); writing the update file over a corresponding operating system file (see *write selected files ... to the primary operating system* - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1);

booting the operating system and registering the update with the operating system (col. 8, lines 15-32; § 3.1, col. 13; *Primary OS/Registry, DLL Registrations ... reboot ... complete installation* – § 3.1, col. 13; § 3.2.5 col. 15).

As per claim 11, refer to claim 3.

As per claim 13, Goodman discloses update comprising a QFE (refer to claim 7).

As per claim 15, Goodman discloses alternate operating system to perform removing, extracting, and writing (refer to claim 2)

As per claim 16, Goodman discloses imaging the booted operating system and using the image to manufacture information handling systems (re claim 9).

As per claim 17-18, Goodman discloses identifying a plurality of updates as security updates (re claim 5-6) and non-security updates (see Fig. 8E-G); selecting the security updates for the extracting and writing (see claims 5-6); and installing the non-security updates after boot of the operating system (e.g. *Primary OS/Registry, DLL Registrations ... reboot ... complete installation* – § 3.1, col. 13; § 3.2.5 col. 15)wherein the security updates are patches to protect worm vulnerabilities (re claim 6).

As per claim 19, Goodman discloses an information handling system comprising:

an operating system having plural files, the operating system in a non-operational state and an alternative operating system operable to support operation of the information handling system (e.g. *write selected files ... to the primary operating system* - col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* – § 3.2.2.1, col. 15; § 3.3.1 col. 17 --Note: completion of installation based on cleaning up a SOS instance reads on removing POS file, such that the primary OS is no longer operational);

an update package supported by the alternative operating system (Fig. 6B-C; § 3.1 col. 13), the update package having one or more update files for integration with the operating system, the update files having a file and directory structure aligned to replace corresponding files in the operating system (col. 11, § 1.3.2; col. 15, § 3.2.2.2 → 3.2.3.1; *shall be deleted* – § 3.2.2.1, col. 15; § 3.3.1 col. 17); an overwrite engine operable to write the update files over the corresponding operating system files (e.g. col. 8, lines 15-32 – Note: loading of SOS files to operate the target POS operating system with change to registry -- § 3.1, col. 13 -- reads on writing over the OS source files) to preintegrate the update files in the operating system.

As per claim 20, Goodman discloses imaging the booted operating system and using the

image to manufacture information handling systems (re claim 9).

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

8.   Claims 8, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et

al. USPN: 7,146,640.

As per claim 8, Goodman discloses extracting an update file further comprises extracting

a file to support recognition of the update file by the operating system (see Fig. 8B, 8E) but does

not make it explicit that update package engine further operable to include the digital signature

files with the update files; but based on the access permissions and *extensions* of file to check on

innocuous code intrusion (see § 2.6 col. 13; *decryption* – col. 13, § 3.1) and decrypting proper

identification of downloaded package content, the security aspect involving verifying the

propriety or identity of a file and its rightful state is suggested. It would have been obvious for

one skill in the art at the time the invention was made to implement the *decryption* of package or

verifying the access permission of Goodman so that this verification process includes extracting

signature of a file, because downloaded package can be subject to innocuous alteration and only

through decryption of a hash or a CRC or signature can the verification sturdily establish

whether the downloaded file is integral or has been altered therefore no longer proper for use,

such as this endeavor has been suggested above.

As per claim 14, refer to claim 8.

9.   Claims 4, 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman et al. USPN: 7,146,640; in view of Murray et al., USPN: 7,000,230 (hereinafter Murray)

As per claim 4, Goodman does not explicitly disclose wherein the primary source file comprises the DLLCACHE and the secondary source file comprise I386. But Goodman discloses updating files package for activation in a Windows systems (§ 1.3, col. 11 Note: this is suggestive of I386 directory) and setting DLL modifications after a reboot (§ 3.1, col. 13; § 3.2.5 col. 15). The providing of a DLL cache (Fig. 11; cache directory – col. 12, lines 2-6) to store downloaded upgrade package is taught in a similar system by Murray analogous to the package downloading and loading of Windows POS of Goodman. It would have been obvious for one skill in the art at the time the invention was made to provide a overwriting of the primary Operating system (POS) with package files such as the DLLs by Murray by replacing the DLL cache or replacing I386 related files in Windows systems because of the need to provide an equivalent functionality (see Goodman: col. 15; col. 8 li. 15-32) of the Windows systems when all files (like DLLs as taught by Murray cache directory) or I386 files (as suggested above) are installed and registered so that Goodman's SOS truly provides the exact corresponding functionality of the Windows systems being upgraded, as in upgrade of Window registry of the downloaded files (§ 3.1, col. 13; § 3.2.5; col. 15; col. 8 li. 15-32)

As per claim 12, refer to claim 4.

Response to Arguments

10.   Applicant's arguments filed 7/3/07 have been fully considered but they are not persuasive. Following are the Examiner's observation in regard thereto.

USC § 101 Rejection:

(A)   Applicants have submitted that the 'requisite transformation when operating on a

information system' is performed by the elements of the Claim (Appl. Rmrks, pg. 6, middle).

The Rejection has set forth the grounds as to why mere descriptive functional elements cannot be

construed as realistically able to be materialized into a real-world results, in accordance with

specific parts of the § 101 statute and the related Guidelines. The claimed elements still amount

to enumerating of descriptive functional elements without a reasonable prospect of having a

hardware device to realize what functionality there is in the so-listed elements. The argument is

therefore not sufficient to overcome the rejection.

35 USC § 102 Rejection:

(B)   Applicants have submitted that Goodman's intrusion security system cannot anticipate

claims 1, 10, and 19, in terms of their respective claimed elements; and particularly, Goodman's

Table II does not address the recited update process of the OS in terms of that this OS is not

operational (Appl. Rmrks pg. 7).

Applicants make a global assertion that Goodman does not anticipate the elements of the

above claims, yet, substantially fail to fulfill a proper rationale in compliant to CFR 1.111(b),

which requires a very specific format. That is, for each cited part of the prior reference,

Applicants have to point out how this part differs from the very particulars of the corresponding

claimed element because otherwise, a global statement as set forth above amounts to a non-prima

facie case of response. The argument in that respect amounts to a mere allegation: Applicant's

arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that

the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

As for the remark that Goodman's Table II does not relate to updating an OS that is not yet operational, it is noted that the language of claims 1, 10, and 19 is more vague than the meaning that appears to have been conveyed from the above Applicants' assertion. That is, the language of these claims (e.g. to write ... over, to replace ... files) cannot dictate a definite or particularly operating state of any system, whether this Operating system is resident, incoming, or outgoing OS respective to an update process and set of files; nor can the claimed update process enforce a scenario by which an entire OS is necessarily yet to be created or built from scratch, because 'writing over' or 'replacing files' entails the resident files or older entities are being substituted by some update-related corresponding entities, nothing remotely related to a building process for an anew system. Goodman teaches requirements predefined for a secondary OS purported to be substituting the primary OS: the primary OS which when contaminated can thus be gradually replaced via proper isolation using this predefined secondary OS. The assertion made about a requirements in Goodman's Table II for a operational system being functional as opposed to 'is not operational' is considered not commensurate with the language interpretation derived from the very constructs of the claim, hence not sufficient to overcome the rejection. Applicant's arguments amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims (e.g. to write ... over, to replace ... files) patentably distinguishes them from the references (Goodman: secondary OS having files replacing the corresponding files of the primary OS).

In all, the claims stand rejected as set forth in the Office Action.

Conclusion

11.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing

date of this final action.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Tuan A Vu whose telephone number is (571) 272-3735. The

examiner can normally be reached on 8AM-4:30PM/Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Meng-Ai An can be reached on (571)272-3756.

The fax phone number for the organization where this application or proceeding is

assigned is (571) 273-3735 (for non-official correspondence - please consult Examiner before

using) or 571-273-8300 (for official correspondence) or redirected to customer service at 571-

272-3609.

Any inquiry of a general nature or relating to the status of this application should be

directed to the TC 2100 Group receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be

obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tuan A Vu
Patent Examiner,
Art Unit 2193
September 6, 2007